



**NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
2021_2 EXAMINATION**

COURSE TITLE: INTRODUCTION TO ECONOMETRICS I

COURSE CODE: ECO 355

UNITS: 3

TIME ALLOWED: 3 HOURS

INSTRUCTION: ATTEMPT QUESTION ONE (1) AND ANY OTHER THREE (3) QUESTIONS

- 1a Explain the term “Econometrics” **(2 marks)**
 - b. Differentiate between mathematical equation and models. **(5 marks)**
 - c. What are the differences between econometrics and statistics? **(5 marks)**
 - d. Differentiate between applied econometrics and theoretical econometrics **(5 marks)**
 - e. Distinguish between type 1 error and type 2 error. **(5 marks)**
 - f. Explain how the power of a test is determined? **(3 marks)**
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- 2a. List and explain the role of computer in Econometrics Analysis **(11 marks)**
 - 2b. Outline the four (4) steps involved in hypothesis testing. **1 Marks Each [Total = 4 Marks]**
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- 3a. Differentiate between Econometrics theory and methods **(5 Marks)**
 - 3b List the importance of econometrics in economic analysis? **(5 Marks)**
 - 3c. How will you critique econometrics? **(5 Marks)**
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- 4a. Distinguish between dependent variable and an independent variable. **(2.5 marks)**
 - b. Describe an error term. **(2.5 marks)**
 - c. List and explain the reasons for the existence of error terms. **(10 marks)**
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- 5a Distinguish between “estimate” and an “estimator” **(3 marks)**
 - b. List the two properties of coefficient of determination (R^2) **(2 marks)**
 - c. Explain the properties of ordinary least square (OLS) estimator. **(10 marks)**